



January 9, 2008

National Emission Standards for Hazardous Air Pollutant (NESHAP):

Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources; (Final)

New Federal Rule
40 CFR Part 63 Subpart HHHHHHH (6H)

Agenda

- Background / History of Federal Clean Air Legislation
- New Federal Rule

Congressional Air Acts

- 1955, 1963, 1967
- 1970 Clean Air Act (CAA), EPA created
- 1977 CAA Amendments
- 1990 <u>Major</u> CAA Amendments including regulations of sources of Hazardous Air Pollutants (HAPs).
- This includes emissions standards for major and area sources of HAPs.

What are NESHAP Area Sources?

Sources of hazardous air pollutants (HAPs) may individually, or in the aggregate, present significant risks to public health in urban areas.

Area Sources of HAP emissions are less than 10 tons per year (TPY) of any one, and less than 25 TPY of all combined.

Subpart 6H targets the air emissions from the HAPs:

- Methylene Chloride (MeCl) contained in paint strippers, and
- Lead, chromium, cadmium, nickel and manganese contained in certain paints.

6H Has Three Main Parts:

- 1. Paint Stripping: specifically for the use of Methylene Chloride (MeCl).
- 2. Miscellaneous Surface Coating: specifically spray application of coatings to plastic or metals that contain the Target HAP (Hazardous Air Pollutant) compounds.
 - 1) Cadmium (Cd), 2) Chromium (Cr), 3) Lead (Pb),
 - 4) Nickel (Ni), and 5) Manganese (Mn).
- 3. Motor Vehicle and Mobile Equipment Surface Coating: this includes all autobody refinishing operations whether or not they use coatings that contain any Target HAPs!

6H Paint Stripping Requirements for use of MeCl

1. Evaluate:

If substrate can be repainted without stripping. If other paint stripping technology can be used.

2. Reduce:

Exposure of all MeCl strippers to air.

MeCl evaporation as much as possible (low temps).

3. Contain:

Practice proper storage and disposal of MeCl strippers (e.g., store in closed, air-tight containers).

4. Develop:

A MeCl minimization plan if more than one ton of MeCl is used annually.

MATERIAL SAFETY DATA SHEET

Klean-Strip Aircraft Remover

HEALTH 2
FLAMMABILITY 1
PHYSICAL HAZ. 1
PPE B



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Page: 1

Revision: 09/04/2007

Supercedes Revision: 02/16/2006

Date Created: 04/19/2005

1. Product and Company Identification

Product Code:

QAR343

Product Name:

Klean-Strip Aircraft Remover

Manufacturer Information

2. Composition of Ingredients

Hazardous Components (Chemical name) CAS#

MEN

Concentration

1. Dichloromethane {Methylene Chloride}

75-09-2

60.0 - 90.0%

6H MeCl Recordkeeping

Recordkeeping Requirements:

- 1. Annual usage of strippers containing MeCl including MeCl content of strippers
 - If more than 1 ton MeCl used annually: MeCl Minimization Plan
- 2. Records must be kept on-site for two years, and may be kept off site after that; all records must be kept for a total of five years.

Other Paint Stripping Requirements

One option used to strip paint is to use a grinding tool to remove old paint from a vehicle.

However, some old paints contain Lead (Pb) and it is harmful to breath lead paint dust. Additionally, lead-containing dust must be collected and disposed of as a hazardous waste.

6H Spray Painting Requirements:

- Spray painting technician training.
- All spray coating applied in a spray booth.
- All spray coatings must be applied with a high-volume, low pressure (HVLP) spray gun, electrostatic, airless/air assisted, or equivalent technology demonstrated by the manufacturer to achieve efficiency comparable to one of the spray gun technologies listed above.....
- **Spray gun cleaning** must be done so that an atomized mist of solvent and paint residue **is not created** outside of a container that collects this material.

Training: Motor Vehicle and Mobile Equipment Surface Coating Operations

Must certify that all spray painting technicians have completed training. The Hands-on and Classroom training may be performed by the facility operator, and must include:

- 1. Spray gun equipment selection, set up and operation, including nozzle selection, spray pattern, air pressure and volume, and paint delivery rate.
- 2. Spray techniques to improve transfer efficiency and minimize overspray.
- 3. Routine spray booth and filter maintenance.
- 4. Environmental compliance with this regulation.

Spray Technician Training and Certification

Owner/Operator must ensure and certify that **all new and existing personnel, including contract personnel**, who apply spray coatings have this training.

Owners who can document or certify that a painter's work experience and/or training is equivalent to that required do not have to provide the initial training. **Training is required every five years.**

Training may be performed by ICAR, automotive paint manufacturer's courses, or other industry representatives; currently no program or course certification is required.

Spray Technician Training Timelines:

New Source (in operation after September 17, 2007): Personnel must be trained and certified no later than 180 days after hiring, or no later than July 7, 2008.

Existing Source: Personnel must be trained and certified no later than 180 days after hiring, or no later than January 10, 2011.

Painters that have received training prior to the dates above satisfies this requirement but training is valid only five years after it is received.

Spray Gun Cleaning

Must be done so that an atomized mist or spray of gun cleaning solvent is not created outside of a container that collects used gun cleaning solvent.

May be done with hand cleaning of parts of a disassembled gun (not recommended), by flushing solvent through a gun without atomizing the solvent, by using a fully enclosed spray gun washer, or a combination of these.

The most effective way to clean spray guns is with an enclosed gun washer.

Gun Cleaner Systems



These reduce the amount of solvent used, reduce exposure to solvent, and make it easy to ship out paint waste residue.





Water Cleaning Systems



Aqueous cleaning systems use water-based detergents and are used to eliminate the use of hazardous solvents.

Solvent Saver for Cleaning Paint Lines

- Cleans fluid lines while using less solvent.
- Forces both compressed air and solvent through the hose for both chemical and mechanical cleaning.



Spray Efficiency Requirements

All spray applied coatings must be applied with a HVLP spray gun, electrostatic application, airless or air assisted airless spray gun, or an equivalent technology that is demonstrated by the manufacturer to achieve transfer efficiency of one of the technologies listed above.

Transfer Efficiency, Cost, and VOCs

For \$200/gallon coating:

Transfer Efficiency	Start with	Total applied	Cost	VOCs emissions (lb/hr)
80%	1 gallon	1.25 gallons	\$250	5
60%	1 gallon	1.66 gallons	\$332	6.64
40%	1 gallon	2.5 gallons	\$500	10
20%	1 gallon	5 gallons	\$1000	20

Applying for a state permit, wasted paint, excessive overspray and fog!

6H Spray Booth Requirements:

- All spray-applied coatings must be applied in a spray booth, prep station, or mobile enclosure.
- All booths, stations and enclosures must be fitted with a filter technology that achieves at least 98% capture of overspray.
- Booths for refinishing of complete motor vehicles or mobile equipment must have 4 walls or side curtains, and a roof, with negative pressure ventilation.
- Miscellaneous parts or vehicle subassemblies must have 3 walls or curtains and a roof, and must be ventilated so air is drawn into the booth.

Spray Booths and Spray Areas





Closed Spray Booth

Open Spray Area

Both must have the ventilation required to comply with both 6H and OSHA regulations!

6H Spray Booth Requirements:

All spray booths, prep stations or mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98% capture of paint overspray. Owner/operators may used published filter efficiency data provided by filter vendors.

TECHNICAL DATA:

AVERAGE ARRESTANCE EFFICIENCY: RECOMMENDED AVERAGE

98.67% at 150 FPM

AVERAGE FILTER DEPTH:

FLAMMABILITY RATING:

UL900, Class II

TYPICAL OVERSPRAY

HOLDING CAPACITY:

2070 grams (4.5 lbs) / sq ft

AIR VELOCITY:

150 FPM

NOMINAL PRESSURE DROP

@150 FPM WITH CLEAN FILTER:

0.05 inch W.C.

FINAL PRESSURE DROP WITH

LOADED FILTER:

0.35 inch W.C.

Hazardous Waste Compliance

Spray booth filters are used for collecting particulates that may contain Target HAPs, especially chromium. While the solvents evaporate, metal HAPs can collect on the filters and can potentially be hazardous waste!



Am I a New or Existing Source?

Requirement dates are different for new or reconstructed sources vs. existing sources.

New or reconstructed sources: in operation after September 17, 2007.

Existing sources must have been in operation before September 17, 2007.

Compliance Dates

Compliance Date for 6H:

- For existing sources, compliance date is January 10, 2011.
- For <u>new or reconstructed</u> sources after September 17, 2007, compliance date is **January 9, 2008**.

Personnel training:

- For existing sources: No later than 180 days after hiring or no later than January 10, 2011.
- For new or reconstructed sources: No later than 180 days after hiring or no later than July 7, 2008.

6H Reporting Requirements

Initial Notification to State:

For existing sources: No later than January 11, 2010.

For new or reconstructed sources: No later than 180 days after startup or no later than July 7, 2008.

6H Reporting Requirements

Notification of Compliance Status:

If you are the owner operator of an existing source, and you did not verify your compliance status in your Initial Notification, then you must submit a Notification of Compliance Status on or before March 11, 2011.

If you are the owner/operator of a new/reconstructed source, you are not required to submit a Notification of Compliance Status if you were able to verify compliance with the regulation in the Initial Notification.

6H Annual Reporting Requirements:

Annual Notification of Changes Report must be submitted prior to March 1 of each calendar year.

This is required if any previously submitted information has changed. Including any deviations from relevant requirements.

Report if there is an increase in MeCl usage, over 1 ton per year. If so, a minimization plan must be developed.

6H Recordkeeping Requirements

- 1. Spray Technician Training Certification
- 2. Documentation of Spray Booth Filter Efficiency
- 3. Documentation of Transfer Efficiency from Spray Gun Manufacturer
- 4. Copies of any Notifications to EPA/State
- 5. Records of deviation from regulation requirements (date, time period and nature of deviation)
- 6. Records that support Initial Notification and Compliance Status

To Comply with 6H you must fill out this form:

Initial Notification/Compliance Certification For Paint Stripping and Miscellaneous Surface Coating Operations Area Source Bule



		Area Source Rule			
		40 CFR Part 63 Subpart HHHHHH (63.11169 – 63.11180)			
lde	ntif	y the Type of Notification Being Made (please check all that apply):			
		☐ Initial Notification ☐ Compliance Certification			
1.	Со	mpany Name			
2.	Inf	Information about the owner:			
	a.	Owner's name and title:			
	b.	Owner's street address:(Street, City, State, and Zip code)			
	C.	Owners telephone number:email (if available)			
	d.	Is the operator the same as the owner? Yes No			
	e.	If the operator's information is different, please provide the information in section 3. (If there are other operator's attach a list with the same information being asked for below).			
3.		ormation about the operator:			
	a.	Operator's name and title:			
	b.	Operator's street address:(Street, City, State, and Zip code)			
	C.	Operator's telephone number:email (if available)			
	d.	Is there any other certifying company official that will sign this form? Yes No			
	e.	If the certifying official information is different, please provide the information in section 4.			
4.	Inf a.	formation about the certifying official: Certifying official's name and title:			
	b.	Certifying official's street address:(Street, City, State, and Zip code)			
		(Street, City, State, and Zip code)			
	C.	Certifying official's telephone number:email (if available)			
5.	Ph	ysical address of the affected source:			
	a.	Address:			
		(Street, City, State, and Zip code)			
	b.	Are the compliance records located at the same location?			

Exemptions from 6H

While there are some exemptions for stationary objects that cannot be moved into dedicated paint booths and some facility maintenance activities, there are not a lot of exempted operations.

Hobbyists may be exempt, but if they spray paint two or more vehicles annually, they are not exempt regardless of whether compensation is received.

Facilities only using air brushes or spray guns with less than 3 oz. capacity are exempt.

Facilities can be granted an exemption from this regulation if they can demonstrate to the Administrator that they do not use the Target HAPs.

Requesting an Exemption from 6H

An exemption from the requirements of Subpart HHHHHHH is case/fact specific, so if you want to request one, you must provide information about your operation to show why it should be granted an exemption.

You must provide **reliable analyses** (material safety data sheets or information obtained from the coating manufacturer) of the coatings that are used at your facility and **certify** that you have determined that you do not spray apply the target HAP (hazardous air pollutant) containing coating.

We will respond to your petition after we have evaluated the information you provided.

Spray application of target HAP containing coatings in a surface coating operation voids any exemption that might be granted as a result of this exemption.

Exemption from 6H Form

Petition for Exemption

Paint Stripping and Miscellaneous Surface Coating Operations

Area Source Rule
40 CFR Part 63 Subpart HHHHHHH (Parts 63.11169 – 63.11180 and Table 1)

In accordance with 40 CFR Part 63.11170(a)(2), an owner or operator of a motor vehicle or mobile equipment surface coating operation may petition the U.S. EPA Administrator for an exemption from the regulatory requirements of 40 CFR Part 63 Subpart HHHHHHH, as they apply to those operations, if the owner or operator can demonstrate that the spray-applied coatings used by the facility do not contain target hazardous air pollutants (HAP). (Note that in determining whether you spray apply target HAP containing coatings, do not include coatings applied using hand-held aerosol cans, or spray guns with a cup capacity of 3 fluid ounces or less.)

As defined in 40 CFR 63.11180, coatings are "target HAP containing coatings" if they contain compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) at concentrations greater than the following thresholds.

- If the compound is a carcinogen, the coating must contain more than 0.1% by mass of that individual target HAP to be considered a "target HAP containing coating."
- If the compound is not a carcinogen, the coating must contain more than 1.0% by mass of that individual target HAP to be considered a "target HAP containing coating."

Refer to the Material Safety Data Sheets for this information.

New Mexico Environment Department Contact Information

Need Help or have questions?

To obtain forms or if you need further information about painting and coating regulations please call:

Air Quality Bureau
Small Business Environmental Assistance Program

Rosanne Sanchez 1-505-222-9583

Steve Dubyk 1-505-222-9507

Sandy Spon 1-505-222-9528

Check out the NMED Air Quality Small Business web site at: www.nmenv.state.nm.us/aqb

Bernalillo County Requirements



Painting and Coating Operations in Bernalillo County

Any person owning or operating any commercial or industrial stationary source in Bernalillo County, which emits more than two thousand pounds of any air contaminant per year or any amount of a hazardous air pollutant, must obtain a Registration Certificate for the source from the Director.

The NMED state exemption for spray painting operations is **not** required within Bernalillo County.

However, notification and compliance with federal regulation 6H is required throughout the US!

Current Costs for Small Business in Bernalillo County



Minimum Fees:

- \$262.00 APPLICATION FEE (1/2 PRICE of \$524)
- \$194.00 ANNUAL FEE
- **Note 1**: Additional Fees may apply if a source is subject to any federal source category regulations
- **Note 2**: The above fees are for the year 2013
- **Note 3**: Every January 1st an increase based on the consumer price index shall be added to all fees.

Contact for Businesses within Bernalillo County



If you need assistance, please contact the Air Quality Assistance Program:

Angela Lopez

505-768-1962

angelalopez@cabq.gov

Thank you for listening to us!

Special Thanks to:

Dan Knipple

Jerry Burns

Scott Benavidez

Bruce Phillips

Jim Maddox

ASA Members